

# Lancaster Extension Announces Educational Meetings

PENNSSTATE



College of Agricultural Sciences

Cooperative Extension Lancaster County

## DAIRY MAP - FOCUS ON THE FUTURE

You are invited to attend this 2-day workshop developed by Penn State to teach business management concepts to dairy farm families throughout the state.

Husbands and wives and business partners are encouraged to attend as a team. This is an interactive workshop in which individuals team up with others in a work group and work on a real-life, case study farm to:

- develop goals for the farm
- develop management strategies that will help the farm reach its goals
- identify critical control points and methods for monitoring progress that is being made
- discuss farm communication challenges
- writing job descriptions, and more

Families are also given homework assignments for developing mission statements for the family and farm that will help guide their personal lives and give purpose to their farming efforts.

Who - Husbands and wives and business partners are encouraged to attend as a team. Participants will receive a comprehensive manual.

When - Jan. 20 and 27 at the Lancaster Farm and Home Center Basement, Lancaster

Time - Registration and refreshments 9:30 - 10:00 a.m. Program begins at 10:00 a.m.

Cost - Cost is \$70.00 for the first person, plus \$20 for each additional person. Lunch provided.

Register - Registration required. Attendance is limited.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Glenn Shirk at 717-394-6851 in advance of your participation or visit.

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**DAIRY MAP - FOCUS ON THE FUTURE**

1st Person \_\_\_\_\_ 2nd Person \_\_\_\_\_

Address \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Cost (includes meals and notebook) 1st person = **\$70.00**  
 Number of extra people (\_\_\_\_) x \$20.00 = \_\_\_\_\_  
 Total = \_\_\_\_\_

Mail registration to Glenn A. Shirk, 1383 Arcadia Road, Room 1, Lancaster, PA 17601-3184 with check in the proper amount, payable to *Agricultural Extension*. Or, call 717-394-6851.

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## MILKER TRAINING AND UDDER HEALTH SCHOOL

One of the most important and biggest tasks on a dairy farm is milking. It affects the income producing end of the business, teat ends and udders, and the quality of the food we sell. You and your milking staff are invited to attend a 2-day Lancaster-Chester County milker training and udder health school.

Purpose - Help milkers understand a cow's mammary system, milking systems and milk handling equipment, plus the relationship of milking techniques and equipment to udder health, milk production and milk quality. Help foster good communications and working relationships between milkers and their supervisors to encourage the adoption of uniform and approved protocols for: milking, udder health, milk quality, and equipment operation and maintenance.

Times - Feb. 13 and 20 Registration and refreshments at 9:30 a.m. Program starts at 10:00 a.m. Note: These are new dates. We ran into scheduling problems on Feb. 12 and 19

Where - Gap Diner, at the junction of Rts. 30 and 41.

Topics - Day 1 a.m. - Basic understanding of the udder, milk quality and equipment  
 p.m. - On-farm familiarity with equipment, drug storage, records, milk testing, cow ID

Day 2. Learning accepted procedures and protocols relating to:  
 milking  
 cleaning and sanitizing  
 equipment operation and maintenance  
 udder therapy, cow ID, testing and withholding milk, drug usage and storage  
 keeping and using records

Who - Milkers and milking supervisors

Cost - \$25.00 for the first person, plus \$5 for each additional person. Lunch provided.

Deadline - Register by February 6 Attendance is limited.

Penn State encourages persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation or have questions about the physical access provided, please contact Glenn Shirk at 717-394-6851 in advance of your participation or visit.

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**MILKER TRAINING AND UDDER HEALTH SCHOOL**

Names \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Address \_\_\_\_\_

Cost (includes meals and notebook) 1st person = **\$25.00**  
 Number of extra people (\_\_\_\_) x \$5.00 = \_\_\_\_\_  
 Total = \_\_\_\_\_

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## MOISTURE CONTENT OF FEEDS

It's Affect on Prices, Dry Matter Intakes and Profits

Glenn A. Shirk  
 Extension Agent, Lancaster County, Pa  
 December 1997

Feeds are purchased for the dry matter they contain and for the nutrients contained in that dry matter. The dry matter content and its nutritive value affect feed prices and feeding rates. Thus, when the moisture content of feeds change, feed prices and feeding rates need to be adjusted accordingly.

As illustrated in Table 1, changes in the moisture content of high moisture feeds have a major impact on dry matter levels. For example, when the moisture content of silage changes by 10 percentage units (from 70 to 60), dry matter also changes by 10 percentage units (from 30 to 40). However, that seemingly small change in moisture had a major impact on dry matter. It changed by 1/3 or 33%. The 60% silage has 1/3 more dry matter than the 70% silage and is worth 1/3 more.

With lower moisture feeds, the impact is less. In Table 1, as the moisture content of hay changed by the same 10 percentage units, the moisture content actually doubled, but it only changed the dry matter content by 11%.

Table 1 Moisture - Dry Matter Relationships

	Old Test	New Test	Difference	% Change
Silage Sample				
Moisture %	70	60	10	14
DM %	30	40	10	33
Hay Sample				
Moisture %	10	20	10	100
DM %	90	80	10	11

Note: The formula for calculating the % DM change, using the silage example, is (the difference 10) divided by (the old DM% 30) x 100 = 33

If feeding rates were not changed, and if cows continued to eat the same pounds of silage, they would be consuming 1/3 more corn silage dry matter. Chances are, they would reduce intakes of other ration ingredients, and that could cause major ration balancing problems if silage feeding rates are not reduced by 1/3. Less significant changes are needed when the moisture content of drier feeds change, but rations and prices should still be adjusted.

Failure to monitor the moisture content of feeds and failure to make appropriate adjustments to the ration when moistures change, can have a major impact on DMI (dry matter intake), milk production and profits. This is illustrated in table 2. In the example in Table 2, the dry matter of silage dropped 7 percentage units (from 39 to 32) and haylage dropped 5 units (from 52 to 47). However, feeding rates were not adjusted. The result is cows consumed 3 lb less dry matter, produced 3 lb less milk and dropped milk income by \$0.90 per day. That's costly!

Table 2 Moisture, Dry Matter Intake, and Milk Production Relationships

Feeds Fed	Old Forage Test		New Forage Test	
	Lb Fed	% DM	Lb DMI	% DM
Corn Silage	31	39	12	32
Haylage	23	52	12	47
Forage DMI			24	21
Concentrate	25	88	22	88
Total DMI (lb)			46	43
% from forage			52	49
Impact on				
DMI (dry matter intake)				-3
Milk (1 lb DMI produces about 2.5 lb milk)				7.5
Milk income per cow per day (@ \$12.00 / cwt)				\$0.90

### Formulas for Adjusting Feeding Rates and Feed Prices

In the example in Table 2, our goal was to have cows consume 12 lb of DM from corn silage and 12 lb of DM from haylage. Divide the desired intakes by the DM content of the feeds to determine proper feeding rates. For example:

12 lb silage DMI desired divided by 0.32 (the new DM%) = 37.5 lb corn silage needed  
 12 lb haylage DMI desired divided by 0.47 (the new DM%) = 25.5 lb haylage needed

Now, let's illustrate feed price adjustments with two examples. Assume that 60% moist (40% DM) corn silage is priced at \$30 per ton and 12% moist (88% DM) hay is priced at \$125 per ton. These are our reference prices and feeds. What is the adjusted price of 70% moist (30% DM) silage and 55% moist (45% DM) haylage? We need to compare DM's, and the formulas are:

DM of silage to be bought 30 x the reference price of \$30 = the adjusted price of \$22.50  
 DM of the reference silage 40

DM of haylage to be bought 45 x the reference price of \$125 = the adjusted price of \$63.90  
 DM of the reference hay 88

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# Gelbvieh Association Completes Successful Year

WESTMINSTER, Colo. — The American Gelbvieh Association (AGA) recently completed a successful 1997 fiscal year.

Total registrations increased slightly from fiscal 1996 (30,178 vs. 30,168). Animal transfers also increased slightly from 12,225 to 12,401, and the Gelbvieh Alliance experienced tremendous growth, more than doubling its size com-

Executive Director Tom Brink said, "Given tough cattle market conditions the past several years, we feel very good about where we are. Gelbvieh market share has increased from 9 percent of Continental beef breed registrations in 1990 to over 15 percent currently. Growth in Gelbvieh Alliance has been phenomenal, as more and more producers and cattle feeders

based marketing can bring to their operations."

The total number of cattle processed through the Gelbvieh Alliance since its inception two years ago now exceeds 80,000 head. Fiscal 1997 numbers reached 50,968, up 112 percent compared to the 24,024 in fiscal 1996.

AGA's Commercial Marketing Director Don Schiefelbein said,

bring above-average dollars is what the Gelbvieh Alliance is all about. We accept all breeds and breed crosses into our alliance, because we're committed to putting more dollars into the pockets of producers with superior genetics and good management practices."

The Gelbvieh breed has grown tremendously during the past 10 years, though the recent cattle down cycle has caused a tempor-

ary leveling-off in registration numbers. Annual Gelbvieh registrations have declined by only 5 percent since 1994, which compares to a 34 percent average decline among the other major Continental beef breeds.

Nationwide, active Gelbvieh cow numbers totaled 71,453 head at the end of the 1997 fiscal year on Sept. 30.